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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,424	04/08/2004	Robert A. De Jonge	GRA01 P-422	8844

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EXAMINER

PILKINGTON, JAMES

ART UNIT	PAPER NUMBER
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3682

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/820,424

Applicant(s)

DE JONGE ET AL.

Examiner

James Pilkington

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-170 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 14-15, 19-33, 35-37, 51-60, 62-69, 75-94, 110-124, and 139-153 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 8-11,13,16-18,34,38-50,61,70-74,95-109,125-138 and 154-170.

DETAILED ACTION

Election/Restrictions

1. Claims 8-11, 13, 16-18, 34, 38-50, 61, 70-74, 95-109, 125-138 and 154-170 are withdrawn from further consideration as they are drawn to a nonelected species in the response filed on 10/24/06.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "first member" {clm 1, 3}, the moveable input member (clms 26-29, 57), the engagement member (clms 68, 90, 93, 94 and 118), a main vehicle electrical power supply and a backup electrical power supply {clm 110}, the three distinct positions of the pawl {clm 146}, and the portable device {clm 150} must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

Art Unit: 3682

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- what is the first member and where is it located? (clm 1 and 3)
- the "switch" in clm 4 should be - -button- -
- the moveable input member (clms 26-29, 57), does the applicant mean the shift member/lever or the button?
- The engagement member (clm 68, 90, 93, 94, 118)

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28, 29, 57, 82-84, 87, 139-149, and 150-153 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Re clms 28, 29, and 57, the specification does not enable for the controller to control the powered pawl "based on the number of times said input member is moved during a predetermined time interval." How could a controller properly actuate the powered pawl if the controlling signal is the number of times the input member is moved? How does the number of times the input member (lever) is moved in a time interval have anything to do with the location of the lever so as to lock the device in the correct position? The applicant has not enabled, in such a way that one skilled in the art would know how to make and use the device, for the controller to function off a controlling signal that is the number of times the input member is moved.

Re clms 82-84 and 87, the specification does not enable for the rod to be made of a polymer material {clm 82, 87}, the resilient material defining a melting temperature and the polymer material having a melting temperature that is greater than the melting temperature of the resilient material {clm 83}. What type of polymer is the rod made of that allows it to be magnetic? What type of polymer is it that has a melting temperature higher than the resilient material and what is the resilient material?

Re clm 139, the specification does not enable for the pawl member to be movable between three distinct positions. What are these three distinct positions? The

specification only enables for the pawl member to be movable between two distinct positions, engaged and disengaged.

Re clm 150, the specification does not enable for a portable device that generates a security signal that is receivable by the controller when the portable device is in the vicinity of the controller. What is this portable device? Where is the portable device located within the vehicle?

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 28, 81, 143 and 144 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation that the pawl member is rotatable relative to the first member. It is not clear to the examiner how this is possible when in claim 1 the pawl is "resiliently connected to the first member." How can something be resiliently connected but rotatable at the same time?

Re clm 28, there is a lack of antecedent bases for the term "controllers" in line 2 of the claim.

Re clm 81, the phrase "ring-like" renders the claim indefinite, as it is not clear how much like a ring the magnet needs to be in order to anticipate the claim.

Re clms 143 and 144, there is a lack of antecedent bases for the term "the {push} button" in lines 2-3 each claim

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6, 14, 15, 20-23, 26-30, 35-37, 51-57, 59, 75-79, 85, 90-94, 110-114, 117-123, 139-145, and 148-153, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Russell, US PGPub 2004/0244524 (filed April 15, 2003).

Re clms 1-6, 14, 15, 20-23, 26, 28-30, 35-37, 51-57, 59, 75-79, 85, 90-94, 120-124, 139-145, and 148-153, Russell discloses a shift assembly for controlling the transmission of a motor vehicle comprising:

- a base (22) configured to be mounted to a motor vehicle, including a stop surface (12)
- a shift member (32) movably mounted to said base (22) and being movable to a plurality of discreet positions (park, reverse, drive etc.)
- a shift gate (34) fixed on the shift member (32) and having at least park, reverse and drive gear positions (paragraph 0027)
- a powered pawl mechanism (54/56) fixed to said base (22)

- said powered pawl having a movable pawl including a first member (58) and a pawl member (54) is resiliently and elastically (everything is elastic as it has some yield) connected to the first member (moves with 58), wherein the pawl member (54) is shiftable between an engaged position wherein said pawl engages a selected one of said gear positions of said shift gate (34) and at least partially restrains movement of the shift member, and a disengaged position wherein said pawl member (54) is disengaged from said shift gate
- said pawl member (54) is rotatable relative to the first member (58) (rotates about pin, see Figures 5-7)
- an electrical switch/input member/movable member (button on shift knob 48, Figure 4, or flow chart character 124) that translates linearly {clm 55} and wherein said pawl mechanism includes a solenoid (56) that shifts said pawl member (54) into said disengaged position upon actuation of the switch (paragraph 0033)
- said shift gate (34) includes notches (52) forming said gear positions, each of said notches including a bottom surface and side surfaces (see Figure 5) that restrains movement of the shift lever (32) in at least a first direction when said pawl member is in said engaged position
- said solenoid (56, a solenoid uses magnets) is biased into said engaged position (biased by spring 98, spring biases links which bias solenoid pin 90)

- said shift lever (32) is pivotably mounted to said base (22) and pivots about a pivot axis (at 132)
- said pawl member (54) is configured such that it does not contact a bottom surface of said notches when in the engaged position (see Fig. 5)
- said shifter includes a controller that does not actuate said powered pawl when said shift lever is in said park position unless said controller determines that a key is in the ignition of the vehicle, and the brake pedal is depressed (Figure 8, paragraphs 0036-0040)
- a movable member/shift lever (32) generates a signal to said controller such that said controller can determine which input position said shift member is in and wherein said controller controls said powered pawl based upon vehicle operating parameters (brake, key in ignition etc.) and position of said shift member
- said movable member/shift lever (32/48) generates a signal proportional to the distance moved, said controller controls said powered pawl based on signal (switches 108 and 116)
- the controller controls the powered pawl based at least in part on the position of the movable member/lever button (48)
- a mechanical linkage (30) coupled to the lever (32)
- the pawl member is movable between three distinct positions (engaged, half way between engaged and disengaged, and disengaged)
- a main vehicle power supply (104/106)

- a backup electrical power supply (used to deactivate lock when user accidentally turns off car before shifting lever back to park, only uses battery 104 not alternator 106, paragraph 0037)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Ruiter, USP 5,220,984.

Russell discloses all of the claimed subject matter as described above. Russell also discloses that the shift gate (34) includes a notch forming a neutral position.

Russell does not disclose that the notch forming the reverse gear position is shaped to permit said pawl member to move into said neutral position by movement of said shift lever when said pawl member is in the engaged position, but prevents movement of said pawl member from said neutral position to said park position when said pawl member is in said engaged position.

Ruiter teaches that the notch forming the reverse gear position (R) is shaped to permit said pawl member to move into said neutral position by movement of said shift lever when said pawl member is in the engaged position, but prevents movement of

said pawl member from said neutral position to said park position when said pawl member is in said engaged position (see Fig. 1) for the purpose of providing a shift lever that can not be moved into or out of the park position without applying the brake (solenoid does not work release pawl unless brake is depressed) (C1/L56-60).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide for the notch forming the reverse gear position to be shaped to permit said pawl member to move into said neutral position by movement of said shift lever when said pawl member is in the engaged position, but prevents movement of said pawl member from said neutral position to said park position when said pawl member is in said engaged position, as taught by Ruiter, for the purpose of providing a shift lever that can not be moved into or out of the park position without applying the brake.

10. Claims 12, 19, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Kito, USP 4,947,967.

Russell discloses all of the claimed subject matter as described above.

Russell does not disclose a manual release member operably connected to the pawl member.

Kito teaches a manual release member (33) operably connected to the pawl member for the purpose of providing an override to the solenoid used to hold the pawl in the locked position (C7/L54-C8/L7).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a manual release member operably connected to the pawl member, as taught by Kito, for the purpose of providing an override to the solenoid used to hold the pawl in the locked position.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Kato, USP 6,679,809.

Russell discloses all of the claimed subject matter as described above.

Russell does not disclose that one of the vehicle operating parameters comprises the engine r.p.m. (speed).

Kato teaches a shift lever assembly wherein an engine revolution speed signal (e) is used to control the shifting of a lever to another gear (C3/L6-C4/L7) for the purpose of preventing careless operation of the shift knob and eliminating the possibility of jack-rabbit starts or hard braking (C3/L36-38).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a shift lever assembly wherein an engine revolution speed signal is used to control the shifting of a lever to another gear, as taught by Kato, for the purpose of preventing careless operation of the shift knob and eliminating the possibility of jack-rabbit starts or hard braking.

12. Claims 25, 146 and 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Durieux, USP 6,059,687.

Re clms 25 and 146, Russell discloses all of the claimed subject matter as described above.

Russell does not disclose that one of the vehicle operating parameters comprises the vehicle speed.

Durieux teaches a shift lever assembly wherein the vehicle speed is used to control the shifting of a lever to another gear (C4/L21-27) for the purpose of preventing movement of the shift lever into the park position when the car is moving (C4/L21-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a shift lever assembly wherein the vehicle speed is used to control the shifting of a lever to another gear, as taught by Durieux, for the purpose of preventing movement of the shift lever into the park position when the car is moving.

Re clm 147, Russell discloses the first position of the pawl comprises a retracted position (disengaged), the second position comprises an intermediate position (half-way between disengaged and engaged, the third position comprise an extended position (engaged).

13. Claims 31-33, 86-89, and 115-116, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Rossetti, USP 5,387,892.

Re clms, 31-33, 86-87 and 115, Russell discloses all of the claimed subject matter as described above.

Russell does not disclose that the solenoid includes a spring biasing the movable/output member, that the magnet defines an attraction region and that the movable member is movable through a range of motion within said attraction region.

Rossetti teaches a solenoid (1) includes a spring (15) biasing the movable member (13) made of a polymer material (everything is a polymer, "made of natural or synthetic compounds" (Webster's II New Riverside Dictionary)), that the magnet (coil 7) defines an attraction region (8) and that the movable member (13) is movable through a range of motion within said attraction region (moves up and down in 8) for the purpose of providing a solenoid that cuts down on assembly time and cost (C1/L8-C2/L2).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a solenoid includes a spring biasing the movable member, that the magnet defines an attraction region and that the movable member is movable through a range of motion within said attraction region, as taught by Rossetti, for the purpose of providing a solenoid that cuts down on assembly time and cost.

Re clm 88, Russell discloses that the shift member (32) is a shift lever rotatably mounted to the base (22).

Re clms 89 and 116, Russell discloses that the plurality of gear positions comprises park, neutral and drive (paragraph 0027).

14. Claims 60 and 62-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Kito, USP 4,947,967.

Russell discloses:

- a base (22) configured to be mounted to a motor vehicle, including a stop surface (12)
- a shift member/lever (32) movably mounted to said base (22) and being movable to a plurality of discrete positions (park, reverse, drive etc.)
- a shift gate (34) fixed on the shift member (32) and having at least park, reverse and drive gear positions (paragraph 0027)
- a powered pawl mechanism (54/56) fixed to said base (22)
- said powered pawl (54/56) having a movable pawl including a first member (58) and a pawl member/engagement member (54) is resiliently connected to the first member (moves with 58), wherein the pawl member (54) is shiftable between an engaged position wherein said pawl engages a selected one of said gear positions of said shift gate (34) and at least partially restrains movement of the shift member, and a disengaged position wherein said pawl member (54) is disengaged from said shift gate
- the powered pawl comprises a solenoid (56)
- at least one device (button on handle configured to generate a signal to a controller
- the plurality of gear positions comprises at least park, reverse, neutral and drive
- a mechanical linkage (30) coupled to the shift member (32)
- the pawl is biased into the engaged position by spring (98)

Russell does not disclose a manual release member operably connected to the pawl member.

Kito teaches a manual release member (33) operably connected to the pawl member for the purpose of providing an override to the solenoid used to hold the pawl in the locked position (C7/L54-C8/L7).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a manual release member operably connected to the pawl member, as taught by Kito, for the purpose of providing an override to the solenoid used to hold the pawl in the locked position.

15. Claims 80-84, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell '524 in view of Rossetti, USP 5,387,892.

Russell discloses:

- a base (22)
- a shift member/lever (32) movably mounted to said base (22) and being movable to a plurality of discreet positions (park, reverse, drive etc.)
- a shift gate (34) fixed on the shift member (32) and having a plurality of notches (Figure 3)
- a powered pawl mechanism (54/56) fixed to said base (22)
- the powered pawl (54/56) comprises a solenoid (56) having a housing (outside of solenoid) and a rod (90) movably mounted within the housing, the rod, made of a polymer material (everything is a polymer, "made of

Art Unit: 3682

natural or synthetic compounds" (Webster's II New Riverside Dictionary)), including a magnet (solenoids use magnets so the rod must have a magnet)

Russell does not disclose that the magnet is encapsulated by a resilient material and that the magnet has a ring-like shape with generally parallel side faces.

Rossetti teaches a solenoid that has the magnet (7) is encapsulated by a resilient material (housing is resilient to protect the magnet) and that the magnet has a ring shape with generally parallel side faces (see Figure 1) for the purpose of providing a solenoid that cuts down on assembly time and cost (C1/L8-C2/L2).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Russell and provide a solenoid that has the magnet is encapsulated by a resilient material and that the magnet has a ring shape with generally parallel side faces, as taught by Rossetti, for the purpose of providing a solenoid that cuts down on assembly time and cost.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington, whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

Art Unit: 3682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Richard Ridley', is positioned above the printed name and title.

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER